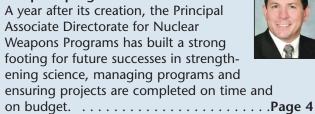
Week of April 25, 2005 Vol. 6, No. 9

### Inside this issue ...



## Tarantino discusses weapons program



#### **WIPP** waste leaves Los Alamos



The first shipment in nearly 18 months of WIPP-bound waste left Los Alamos April 13. The Laboratory's shipments to the Waste Isolation Pilot Plant resumed when a truck carrying TRUPACT

### Donna Smith — Jane of all trades





The Department of Homeland Security has a Web site (http://www.ready.gov/index.html) that offers advice to citizens on how to be better prepared in the event of a terrorist attack. Have you looked at this Web site? And what, if anything, have you and your family done to prepare for such an emergency? Learn what your co-workers had to say on Page 6.



Nonprofit Organization U.S. Postage Paid Albuquerque, NM Permit No. 532

P.O. Box 1663 Mail Stop C177 Los Alamos, NM 87545

LALP-05-002

# Los Alamos helps Texas schools remove radioactive gammators

by Jim Danneskiold

Crews hired by the state of Texas and advised by the Laboratory recently recovered three large radioactive sources from high schools in San Antonio, the latest success in the Laboratory's nationwide effort for the National Nuclear Security Administration's program to reduce security and other risks associated with radioactive material.

Working with the San Antonio Independent School District, the Texas Department of State Health Services, Radiation Program led the effort to recover the three heavily shielded devices, known as Gammators, which contained four-inch-long rods of cesium-137. The Gammators were removed from Brackenridge, Fox Tech and Lanier high schools, where they had been stored for more than 30 years after a brief career irradiating seeds, cells and other objects with gamma rays for school science experiments.

"We're most grateful to the National Nuclear Security Administration for funding this effort, and to Andy Tompkins and everyone from Los Alamos for making sure this operation was carried out safely and securely," said D. Ray Jisha of the Department of State Health Services, who supervised the work.

Over the past 25 years, Los Alamos has recovered more than 10,500 radiation sources of various types from schools, hospitals, research institutes and industrial facilities, such as oil drilling companies. Those sources have contained everything from plutonium to cobalt.

"This represents the National Nuclear Security Administration's efforts to further prioritize and accelerate the removal of high risk radiological materials that can be used in a dirty bomb," said Ed McGinnis, acting director of NNSA's Office of Global Radiological Threat Reduction. "We are working overtime across the nation to remove and secure materials that pose not only a safety hazard but a security risk, and we commend Los Alamos for another job well done."

The barrel-shaped devices at the three high schools each weigh about 1,850 pounds. Surrounding each radioactive source, which rests on a small turntable, is a welded steel shell filled with lead shielding. Each one-inch diameter rod originally

continued on Page 3



Andy Tompkins of Los Alamos' Offsite Source Recovery Project looks at a Gammator. The Gammators recently were removed from three Texas high schools, where they had been stored for more than 30 years after a brief career irradiating seeds, cells and other objects with gamma rays for school science experiments. Photo by LeRoy N. Sanchez

# For Your Safety

### Learn to handle stress

Everyone has stress. How one handles it is what makes all the difference.

We all experience stress over issues relating to our jobs. We may feel pressured to get the work done, or worried about losing our jobs. We stew over conflicts and misunderstandings with team members. We might find the work too difficult or not challenging enough.

Besides stress directly related to our jobs, we all come to work with worries and concerns about other aspects of our lives. Difficulties with children, sick parents, tight finances and lack of free

time are common problems for working people. If we deal with stress poorly, we can pay the price in ill health, accidents, inability to concen-

trate on our work and unhappiness. Here are some tips for handling stress, both at work and off the job:

• Decide what you can and can't do about something. You can't do much about the economic climate of the world, but you might be able to help your company survive hard times.

• If there is nothing you can do about a problem, learn to let it go.

• Speak up. If something is bothering you, talk about it.

• Take some quiet time for yourself every day. This isn't easy, but it pays off.

• Take some time everyday for fun too. Spending even 15 minutes a day on a special hobby can make it easier to deal with everything else going on in life.

• Take good care of yourself physically. Get enough sleep, eat a healthy diet and exercise regularly, at least several times a week.

• Take control of your life. Learn to stay organized and manage your time. Do the most important things first and leave the rest for later.

· Learn some relaxation techniques. Concentrating on deep breathing, using muscle relaxation techniques or visualizing a tranquil scene are all effective ways of shaking off stress and anxiety.



The Los Alamos NewsLetter, the Laboratory bi-weekly publication for employees and retirees, is published by the Public Affairs Office in the Communications and External Relations (CER) Division. The staff is located in the IT Corp. Building at 135 B Central Park Square and can be reached by e-mail at newsbulletin@lanl.gov, by fax at 5-5552, by regular Lab mail at Mail Stop C177 or by calling the individual telephone numbers listed below. For change of address, call 7-3565. To adjust the number of copies received, call the mailroom at 7-4166.

> **Editor:** Jacqueline Paris-Chitanvis, 5-7779

Associate editor: Steve Sandoval, 5-9206

Production editor: Denise Bjarke, 7-3565

Graphic designer:

Edwin Vigil, 5-9205

Staff photographer:

Los Alamos National Laboratory is operated by the University of California for the National Nuclear Security Administration (NNSA) of the U.S. Department of Energy and works in partnership with NNSA's Sandia and Lawrence Livermore national laboratories to support NNSA in its mission.

Los Alamos enhances global security by ensuring safety and confidence in the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction and improving the environmental and nuclear materials legacy of the Cold War. Los Alamos' capabilities assist the nation in addressing energy, environment, infrastructure and biological security problems.



Printed on recycled paper.

FROM THE TOP



Next week I'm scheduled to teach Module 3 of the Safety Training and Observation Program (STOP) to the Executive Board.

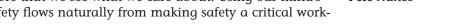
This module focuses on using our mind's eye to increase safety awareness. That is, it emphasizes how to employ visualization to "see" what could happen if a safety incident occurred.

Our mind's eye relies on a questioning attitude. When we encounter potentially unsafe situations, conditions or actions, we must be willing

- What could happen if the unexpected occurred?
- How can this job be done more safely?

The STOP checklist folds these questions into the management safety walk-around process. As we observe our coworkers and workplaces, the checklist reminds us to look not only at our physical surroundings, but also at the people, tools and equipment

I've said before that we see what we care about. Using our mind's eye to "see" safety flows naturally from making safety a critical workplace priority.



I value your safety, and that's why I'm asking you to serve as the Lab's safety eyes. The STOP visualization and walk-around techniques are not about inspecting employees in a fault-finding fashion. On the contrary, they are about seizing positive opportunities to ensure that our coworkers go home safely every day. That result, at heart, is what safety is all about.



Laboratory Director Pete Nanos

# Appendix F NWP mid-year self-assessment

Editor's note: Appendix F. We've all heard about it around the Laboratory, but do we all really know what it is or why we should care? Briefly, Appendix F is the means by which the National Nuclear Security Administration evaluates the Lab's performance each year. It's the basis for the Lab's annual report card, and as with any report card, the goal is to get good grades or high scores.

Appendix F currently consists of 10 objectives — six for mission and four for operations. These 10 objectives and their 46 supporting measures span the work of the entire Laboratory, from the nuclear weapons program and science and strategic research to infrastructure, business systems and the work force.

In the March 21 "Director's Notebook" in the Daily Newsbulletin, Director Pete Nanos notes that "not only does Appendix F provide the basis for NNSA's annual appraisal of the Laboratory's performance, but its objectives also form the framework for our near-term corporate objectives and our top five midterm performance priorities ... In [NNSA Director Linton] Brooks' opinion, Appendix F gives NNSA, UC and the Laboratory a common view of the forces shaping our ability to perform, helping us all understand where we are coming from and where we are going."

The following article is the first in a series by senior managers updating employees on the status of the Laboratory's efforts to meet its Appendix F goals. The full text of Appendix F, including all Performance Objectives and Measures, can be accessed through the Laboratory's Official Documents Web site.

by Fred Tarantino, principal associate director for Nuclear Weapons Programs

irector Nanos has emphasized the importance of the Laboratory achieving a 90 percent outstanding rating on Appendix F performance measures this year. Within our 10 Appendix F objectives (see side bar at right), four objectives (1, 2, 3 and 6) and one measure relate to the Laboratory's nuclear weapons program. Measure 7.3, which is part of the work force objective, is specific to development of future weapons points-of-contact. In all, half (23) of the supporting performance measures are related to the weapons programs.

As of mid-year, Nuclear Weapons Programs still

### FY2005 Appendix F Performance Objectives

- 1. Weapon certification and assessment
- 2. Long-term weapon stewardship
- 3. Near-term weapon stewardship
- 4. Threat reduction
- 5. Science, engineering and technology
- 6. Facilities and infrastructure
- 7. Work force
- 8. Operations (safety, security, regulatory compliance)
- 9. Business processes and systems

10. Community relations

has a way to go to achieve our goal of having 21 measures assessed as outstanding. Yet, we are ahead of our assessment from last year. We have had many outstanding accomplishments and successes this year. These successes are indicative of the superb work for which Los Alamos has always been known and reflect heroic efforts by personnel in many different Laboratory organizations. The following is but a snapshot of successes within the Lab's nuclear weapons program during the last several months:

- Completion of hydrodynamic test 3625 a very high priority for NNSA, the Navy and the Lab.
- Release of Advanced Simulation primary code critical for the W76-1 Life Extension Program a foundation block for the science-based stockpile stewardship program.

continued on Page 3

# The work force of the future

by Tom Bowles, chief science officer

The Laboratory is going through dramatic change, in part driven by the cessation and restart of work activities last year. A second driver that will be a dominant force is the age distribution of our work force — we anticipate that a large fraction of the Lab's work force will turn over in the next five



to six years. Part of that will undoubtedly be driven by the upcoming contract rebid. Part will be driven simply by the demographics of our work force. A large fraction of our staff came to Los Alamos many years ago, discovered they enjoyed the challenges and opportunities they found and have remained here for their entire careers. However, by simply looking at the age distribution of our staff at the Laboratory, it is clear we will be facing a challenge in replacing a significant fraction of our work force over the coming years.

Director Nanos has stated that we need to be proactive in managing this transition. He is putting forward a number of initiatives to ensure that our future work force has the numbers and quality of staff required to meet our responsibilities to the nation. We will be working to bring in promising early career staff, as well as making strategic hires of more established staff. We will be significantly increasing the number of postdocs at the Laboratory. Postdocs are the single most important source of talented staff to meet the Lab's future work force needs. We also are working on ways to increase the support of science at the Laboratory to ensure that we can retain staff.

The Laboratory will be quite different in the years to come — we are working to make the changes necessary to make Los Alamos the best science and engineering laboratory in the world. You will see real and lasting changes over the next few years as we work to make that vision come true. One of the most obvious will be the many new faces of the next generation of highly talented staff.

### Appendix F ...

continued from Page 2

- Facility resumption to support key programmatic deliverables getting us back on track post-suspension.
- TA-18 Early Move management team, processes and schedule in place.
- Proton radiography experiments completed at LANSCE for Los Alamos, Livermore and Sandia, and TA-55 gas gun results on accelerated and naturally aged Pu alloys furthering our understanding of important materials.
- Delivered all scheduled fiscal year 2004 Qual pits and on track to build six pits in fiscal year 2005 — exercising the small number pit production capability re-established at the Laboratory in fiscal year 2003.
- Completed 29 of 31 Level 1 and 2 NNSA milestones on time demonstrating robust project management.

The Laboratory's goal of achieving an overall "outstanding" performance assessment under Appendix F is really a tool to focus the Laboratory's attention on performance in areas critical to our national security mission. Perhaps most importantly, getting a strong Appendix F rating this year will mean that Laboratory employees can again see recognition of our own successes.



### Cooperative agreement meeting held at San Ildefonso Pueblo

Laboratory Director Pete Nanos, center, listens to a presentation at the 18th cooperative agreement executive meeting at San Ildefonso Pueblo. The meeting with representatives from the four accord pueblos — Cochiti, Jemez, San Ildefonso and Santa Clara — the Department of Energy/National Nuclear Security Administration Los Alamos Site Office and the University of California gave attendees the opportunity to discuss issues of mutual concern and share progress reports. At right in photo is Elmer Torres of the Lab's Tribal Relations team in the Government Relations Office (CER-1). Seated next to Nanos is San Ildefonso Pueblo Gov. Dale Martinez. To his right is Ed Wilmot, NNSA Los Alamos Site Office manager. Photo by LeRoy N. Sanchez

### Los Alamos helps Texas ...

continued from Page 1

contained about 400 Curies of highly radioactive cesium-137, which has decayed to about half that level over time.

About 150 of the Gammators were supplied to schools across the United States and to other countries in the 1960s and 1970s through the "Atoms For Peace" program. Hospitals used similar devices to irradiate blood.

Crews had to use brute force to wrestle one of the devices down two flights of stairs to reach the truck during the operation.

Because of the heavy shielding, the stored devices posed little risk to students and teachers at the three schools. However, the slim chance of exposure through inappropriate handling made removal of the Gammators a priority for the state, the school district and for the Laboratory.

"Our teams from Los Alamos have gone into hundreds of places all over the country to



remove radioactive sources that are no longer needed," said Tompkins, who works for Los Alamos' Offsite Source Recovery Project, part of the Department of Energy/NNSA Radiological Threat Reduction Program. "Since the 9-11 attacks, we have stepped up our efforts significantly because of the potential threat that any radioactive material might be misused."

Bill Vinal, science director for the school district, said state technicians frequently tested the three Gammators for leaks.

"Although there was never any danger to the students or teachers, we haven't needed these in many years and wanted them moved to a safe, secure location," Vinal said. "There's just no reason to keep this type of material around."

Employees of U.S. Stars, a San Antonio, Texas, contractor hired by the state of Texas, maneuver a Gammator. The barrel-shaped devices each weigh about 1,850 pounds. Photo by LeRoy N. Sanchez

# Tarantino discusses weapons program



Fred Tarantino

by Jim Danneskiold

A year after its creation, the Principal Associate Directorate for Nuclear Weapons Programs has built a strong footing for future successes in strengthening science, managing programs and ensuring projects are completed on

time and on budget, said Fred Tarantino, PADNWP, in a recent interview.

The separation of program and line functions has let line management increase its attention to science and operations. At the same time, the Laboratory's customers have become comfortable with a more traditional matrix management structure.

"We've made a lot of progress — program managers and line managers working together — in convincing our customers that we have an executable approach. Every day I'm getting more positive feedback from NNSA, the Department of

Defense and Congress," Tarantino said.

Among examples of recent successes were DoD's review of plans for certification of the W88 warhead, which officials praised for strength, consistency and well-integrated science, and NNSA's review of the B61 life extension program that singled out heroic efforts to build hardware and complete key field tests.

"In addition, we're ahead of the other labs in quality assurance, NNSA is recognizing our energy level and the competency we're showing in the application of DOE's new quality rules to R&D," Tarantino said. "It's positively affecting the way we work with our customers."

A key project management tool that will continue to improve the weapons program is earned value measurement, through which progress is closely tracked and milestones are better defined. By carefully measuring cost and schedule performance against project scope, Los Alamos is leading the complex in progressive management. "I must say NNSA headquarters is really happy about this," Tarantino said.

After managing the Nevada Test Site for Bechtel, Tarantino came to Los Alamos last July and said he felt honored to be part of an institution he had admired for years.

"I've gained an appreciation for how Los Alamos is made up of hardworking, competent professionals who are committed to our mission, care about their colleagues, and want to do the job right," he said.

Tarantino says four key areas will determine the success of the weapons program at Los Alamos:

- Sustained funding for science campaigns, which he said will depend on strong project controls and close linkages between theoretical and computational activities and experiments.
- Extending basic research capabilities. "LDRD alone can't sustain our science base," he said. "However, we're gaining support for the Weapon-Supported Research program to preserve and extend the science base under division leadership."
- Continued facility consolidation. Worldclass science requires world-class facilities, and identifying and funding the facilities needed to sustain the mission and meet the Design Basis Threat are top priorities for Tarantino.
- Designing and fielding the Reliable Replacement Warhead while designers with test-based knowledge are still available. "I

continued on Page 7

# **WIPP** waste leaves Los Alamos

The first shipment in nearly 18 months of WIPP-bound waste left Los Alamos April 13.

The Laboratory's shipments to the Waste Isolation Pilot Plant recently resumed when a truck carrying TRUPACT containers left Los Alamos for the Carlsbad disposal site.

"Getting this program back underway has been a major priority," said Ken Hargis, Environmental Management Program director in the Environmental Stewardship (ENV) Division. "Our efforts have benefited enormously from the cooperation between the Laboratory, the Los Alamos Site Office and the Carlsbad Field Office. WIPP is the safest place for this waste."

Los Alamos' TRU program has undergone major shifts in both philosophy and approach to accelerating the cleanup of the TRU wastes at the Lab. TRU waste includes isotopes of uranium and of man-made elements, such as plutonium and americium.

A collaborative effort between LASO and the Carlsbad Field Office staff has resulted in more efficient and streamlined operations, according to Hargis. "This momentum will be critical to our future success and further acceleration of legacy cleanup at [the Lab]," Hargis said.

The last Los Alamos shipment to WIPP occurred in September 2003.

Shipments are scheduled to continue weekly, one truckload a week at first, increasing to two truckloads a week through the summer, and reaching four or more weekly by the end of 2005. The program has a goal of moving all stored legacy TRU waste — about 50,000 drums — from the current location at Los Alamos' Technical Area 54 to WIPP by the end of 2012.

About 2,000 drums of the Lab's TRU waste are designated as part of a program called "Quick to WIPP." Quick to WIPP was established to give the highest transport priority to waste that has the highest activity and the highest risk of dispersion if there were an



Workers at Los Alamos' Radioassay and Nondestructive Testing Facility load drums containing transuranic waste into a TRUPACT container. The TRUPACT is then bolted onto a flatbed. The first shipment in 18 months recently left for the Waste Isolation Pilot Plant. A TRUPACT container has a stainless steel skin over a 10-inch layer of polyurethane foam designed to absorb shock and resist fire. The containers are 10 feet tall and 8 feet in diameter. One TRUPACT can hold up to 14 waste drums, so a normal truckload of three containers can carry up to 42 waste drums. Inset photo, A truck carrying TRUPACT containers travels east on NM 502 with a shipment of waste headed for the Waste Isolation Pilot Plant in Carlsbad. Photos by Patricia Leyba, Environmental Stewardship (ENV) Division and John Bass, Public Affairs

accident or disaster. The waste could include such items as contaminated rags, used protective clothing, tools, chunks of concrete and pieces of metal. All Quick to WIPP drums are scheduled to be moved to Carlsbad by summer 2006, according to Davis Christensen, deputy project director of the TRU Certification Program (NWIS-TP).

Reducing the number of waste drums is one of the special precautions the Laboratory is taking with Quick to WIPP shipments, Christensen said. The drums have a four-to-five-step process to characterize and certify that the waste meets all requirements for a WIPP shipment before it is loaded in a TRUPACT container. The TRUPACT containers are securely bolted to the flatbed trailer used to transport them.

Since shipments stopped in 2003, Los Alamos has been working with the Central Certification Project — run by Washington TRU Solutions — to get them started again.

CCP has taken over many of the processes of identifying the contents of the drums and certifying them for shipment. CCP currently provides similar support for other DOE sites.

# DOE awards contract to UC to manage and operate Lawrence Berkeley National Laboratory

The University of California will continue to manage and operate the Lawrence Berkeley National Laboratory. The announcement by the Department of Energy of a five-year contract to UC is the result of the first competition of the management and operating contract for the laboratory since its inception.

The value of the new contract is an estimated \$2.3 billion. Berkeley Lab's \$469 million annual budget is funded by the department's Office of Science, other DOE programs, as well as other government agencies and private industry.

"Because of its outstanding work, including 10 Nobel Prizes won by its scientists, Lawrence Berkeley Laboratory has helped ensure U.S. scientific leadership for more than 60 years," Secretary of Energy Samuel W. Bodman said. "This contract

# Lab, NMSU select seven joint research projects

Seven projects — each with at least one researcher from the Laboratory and one from New Mexico State University — were selected for funding under a new initiative designed to increase collaboration between the two institutions.

The projects will be funded over the next two years with each project receiving between \$105,000 and \$135,000. Funding for the initiative comes from the University of California under the auspices of a memorandum of agreement signed on Feb. 16, 2004.

The projects fall into the areas of biosecurity, water security, social behavior modeling and information fusion.

Researchers from a wide variety of disciplines — including astronomy, biology, computer science, engineering, management, mathematics and psychology — are involved with the projects that have received funding. The projects were selected from more than 30 proposals by a committee of representatives from both institutions.

According to NMSU, in addition to providing "seed money" that can be leveraged into larger grants, the partnership is a way for the Lab to build the next generation of scientists since several NMSU students will be working at Los Alamos this summer on projects funded through the agreement.

The funded projects are

- From Low Protein Structure to Near Atomic Resolution Structure
- Phylogenetic Predictions of the Capabilities of Novel Bio-threat Agents
- Water and Bio-security: Innovative Membranes for Water Treatment and Smart Sensors
- Integrated EEG and Brain Mapping for Brain Machine Interface in Security Monitoring
- Modeling and Analyzing Social Behavior: Applications Toward National Security
  - Data Mining in the Terrabyte Forest
- Signal Detection via Adapted Filter Banks and Geometric Dimensionality Reduction.

award will allow LBNL and its outstanding researchers and staff to seamlessly continue their work as they set new standards of scientific excellence."

The new "award-term" contract contains a number of innovative provisions intended to provide incentives for superior performance. The department may recognize superior performance through phased extensions, beyond the initial five-year term of the contract, for up to a total of 20 years, if the contractor meets performance criteria developed by DOE.

Following a short transition period, the initial contract term will be June 1, 2005, to May 31, 2010. The University of California has operated the laboratory since 1943 for DOE and its predecessors.

The contract award follows the submission of a proposal by the regents of the University of California in response to DOE's Dec. 15, 2004, Request for Proposals. Marvin E. Gunn Jr., manager of the Office of Science's Chicago Office, was the source selection official.

"Our review determined that the proposal by the University of California was responsive to the RFP and that award of the contract was in the best interest of the government," Gunn said. "The new and innovative aspects of this agreement and the opportunity to bring its provisions into alignment with DOE's best M&O contracting practices, demonstrate the value that competing the contract brings to managing this Laboratory."

This contract award is the first involving a major DOE science laboratory in response to Congressional legislative direction in 2003 to compete five Science and Defense Laboratory M&O contracts that were awarded more than 50 years ago without competition.

LBNL's missions include basic science and technology development, with no classified programs or facilities. Areas of research include the physical sciences, computing sciences, energy sciences and biosciences.

LBNL's unique research facilities, which attract scientists from all over the world, include the Advanced Light Source, Biomedical Isotope Facility, National Energy Research Scientific Computing Center and the National Center for Electron Microscopy. The Molecular Foundry, a national nanoscience research center, currently is under construction and is expected to go into full operation in 2006.



### Lab/Carbon Designs Inc. sign CRADA

Acting Deputy Laboratory Director Don Cobb greets Carbon Designs Inc. founder and former Lab technical staff member Brad Edwards during a signing ceremony in the Materials Science Laboratory Auditorium at Technical Area 3. The Lab and Carbon Designs Inc. signed a cooperative research and development agreement to collaborate on the development of ultra-strong fibers made of carbon nanotubes that are expected to be many time stronger than any current engineering materials. "It's the seminal ideas that come out of small teams here at the Laboratory that lead to these successes," said Cobb. The Cooperative Research and Development Agreement is one of the largest sponsored research agreements ever signed by the Laboratory. CDI also received an exclusive license for the Laboratory's intellectual property and may obtain additional rights to patents that result from the collaboration. The project's goals include developing new methods for synthesizing carbon nanotubes and new technologies for producing ultra-strong fibers from the carbon nanotubes. "We're talking about something that is revolutionary," said Edwards. Carbon Designs Inc. plans to initially invest \$2 million in the joint effort. At right in photo is Yuntian Theodore Zhu of the Superconductivity Technology Center (MST-STC), while behind Edwards is Brent Walker of CDI. Photo by LeRoy N. Sanchez



Department of Homeland Security has a web site (http://www.ready.gov/index.html) that offers advice to citizens on how to be better prepared in the event of a terrorist attack. Have you looked at this Web site? And what, if anything, have you and your family done to prepare for such an emergency?



### Susan Ramsay of Nuclear Materials Technology (NMT-DO)

I have looked at a Web site, but I'm not sure if it was that one. What we've done as a family to prepare for an emergency is that we have all

gotten our own cell phones. That way we can all stay in touch in case something should happen. And I also have an increased awareness of my surroundings.



## Thomas Boorman of HPC Systems Integration (CCN-9)

Yes, I have looked at it. As far as preparing for an emergency, I know the emergency routes out of town in case we need to evacuate the Hill but other than that I haven't

really done much.



### Dave Kratzer of High-Performance Computing Systems (CCN-7)

No, I have not seen the Web page. As a family, we've talked about it and we do have a plan for which relatives to contact in case of a

separation due to some emergency, a contact list if you will. This hit home during the Cerro Grande Fire when the five of us in my family were in four different locations and needed to reconnect and get back together as a family.



### Doug Tuggle of Emergency Management and Response (EMR)

I haven't had the opportunity to go to the Web page, but I have looked at a lot of information on homeland security. As far as family goes,

my children and I are aware that I might end up here in the Emergency Operations Center because of my job responsibilities. But during times of emergency, it is always nice to be together as a family. I remember during the fire [Cerro Grande] we got a taste of what it's like to be in a full-blown emergency, and as a family we are a lot more aware of the means by which we can keep in contact with one another.

Miranda Salazar of Nonproliferation and Security Technology (N-NST)



No, I haven't seen it, but at home we have a good supply of canned goods, bottled water and dried foods and, just as important, lots of batteries. You never know when you are going to need them, and I'd hate to run out.



# Los Alamos Employees' Scholarship Fund awards scholarships

Santa Fe High School senior Taryn Flock is the recipient of the four-year, \$10,000-a-year platinum scholarship from the Los Alamos Employees' Scholarship Fund. The fund is administered through the Los Alamos National Laboratory Foundation.

In addition, Ryan Abreu of Las Vegas Robertson High School, Michael Kosdan of St. Michael's High School, Madeline Tiee of Los Alamos High School and Jessie Zepeda of Capital High School in Santa Fe will receive four-year \$2,500-a-year gold scholarships.

Sixty high school seniors and college students are receiving 2005 Los Alamos National Laboratory Employees' Scholarship Fund scholarships at an award ceremony Sunday (May 1) in the Lumpkins Ballroom at La Fonda Hotel in Santa Fe.

Again this year, the University of California is awarding seven UC Nonresident Tuition Waiver scholarships. Two are full Nonresident Tuition Waivers; two are three-quarter tuition waivers; one is a half Nonresident Tuition Waiver; and two are one-quarter tuition waiver scholarships. These renewable four-year scholarships give Northern New Mexico students who wouldn't qualify for UC in-state tuition through a different program, financial assistance to attend a UC campus at or closer to the in-state tuition rate, explained Tony Fox of the nonprofit Los Alamos National Laboratory Foundation. Priority is given to students from low-income families who are first generation college students.

The seven students receiving the UC scholarships are Flock, Leif Hopkins and Andrea Romero of Santa Fe High School, Tyreisha Foster of West Las Vegas High School, Daniel Franken of United World College of Southeast Asia, and Theodore Garcia and Jared Lindsay of St. Michael's High School.

Twenty-eight students will receive \$1,000 one-year renewable scholarships, eight students will receive four-year \$1,000 silver scholarships and 10 students will receive one-year \$2,000 Comforce Technical Services scholarships. Comforce is a subcontract company providing human resources services to the Laboratory.

Students receiving \$1,000 college scholarships, and the high school or college they currently attend are as follows: Denise Aguilar of Penasco High School; Jugnu Ahluwalia of University of New Mexico, Los Alamos; Rene Bailon of the College of Santa Fe; Jessie Bunkley and Elizabeth Cerny-Chipman of Santa Fe Preparatory School; Andrea Chavez, Rebecca Gonzales and Jose Solis of New Mexico State University; Azul Freedom and Tanya Greer of Las Vegas Robertson High School; Francheska Gurule of West Las Vegas High School; Zigfried Hampel-Arias, Anna Miller, Amanda Minnich, Kyle Nekimken, Samantha Slutzky and Robert Torney all of Los Alamos High School; and Austin Minnich of University of California, Berkeley.

Also receiving \$1,000 scholarships are Marcel Herrera of Northern New Mexico Community College in Española; Steven Honig of Montana State University; Christopher Kempes of Colorado College; Jessica Martinez of Coronado High School; Leif Hopkins, Ashley Jaramillo and Thomas Johnson of Santa Fe High School; Jasmine Spencer of Albuquerque St. Pius High School; and Gina Torres and Heidi Torres-Fewell of Taos High School.

The eight, \$1,000 for four years silver scholarship recipients are Layne Bettini of Taos High School, Sarracina Littlebird of Santa Fe Preparatory School, Kevin Claytor and Menghuan Lu of Los Alamos High School, Jasmine Olivas of Española Valley High School, Mark Sena of St. Michael's High School, Skye Seppanen of Monte del Sol Charter School and Timothy Tapie of McCurdy School.

continued on Page 7

## Los Alamos Employees' Scholarship Fund drive campaign kicks off May 2

The Los Alamos Employees' Scholarship Fund encourages Laboratory employees, retirees and subcontract personnel to donate to a fund that awards college scholarships to Northern New Mexico area students. Lab workers have until June 15 to return completed forms to the nonprofit Laboratory Foundation offices in Española. Remittance envelopes will be included with pledge forms, which are scheduled to be mailed to all Laboratory workers at their mail stops the first week of May.

For more information on the scholarship fund, write to Tony Fox of the LANL Foundation at *tfox@lanlfoundation.org* by e-mail, call Debbi Wersonick of the Community Relations Office (CRO) at 7-7870 or see the Week of April 11 Los Alamos NewsLetter.



Taryn Flock of Santa Fe High School



Ryan Abreu of Las Vegas Robertson High School



Michael Kosdan of St. Michael's High School



Madeline Tiee of Los Alamos High School



Jessie Zepeda of Capital High School in Santa Fe

### Tarantino ...

continued from Page 4

hope this will be the heart and soul of the weapons program for the next decade," Tarantino said. "The post-9/11 threat requires weapon systems of greater surety, that can be certified more easily without testing, and which will drive the manufacturing infrastructure of the complex toward greater cost effectiveness."

"This Laboratory is extremely important to the country and has a tremendous heritage. I believe some of its best days are yet to come as we put into place an effective post-Cold War deterrent and reduce the nuclear threat," he said. "People of character welcome great challenges. Los Alamos attracts people of character and together we will make the next decade the best in Los Alamos' history. I am certain of it."

# This month in history ...

### **April**

1605 — Gov. Don Juan de Oñate leaves the first record on Inscription Rock in west central New Mexico.

1790 — U.S. Patent system is established.

**1828** — First edition of the Webster dictionary is published.

**1869** — The American Museum of Natural History opens in New York City.

**1902** — Marie and Pierre Curie isolate the element radium.

**1913** — Gideon Sundback of Hoboken, N.J., patents the zipper.

1917 — America enters World War I.

1930 — Twinkies hit the market. The first twinkies were banana-filled.

**1937** — The Golden Gate Bridge in San Francisco opens.

**1946** — Zia Co. takes over the responsibility from the Army for most construction and technical area maintenance at the Laboratory.

1958 — National Advisory Council on Aeronautics is renamed National Aeronautics and Space Administration (NASA).

1961 — IBM's Stretch computer, described as the world's most powerful, is delivered to the Lab.

1970 — The first Earth Day is held.

1974 — On Opening Day in Cincinnati, Hank Aaron ties Babe Ruth's all-time home run record of 714.

1975 — US forces pull out of Vietnam, and the Vietnam war ends, with the South surrendering to the North.

1982 — NASA announces the selection of Sally Ride as the first U.S. woman astronaut.

1983 — New Mexico Gov. Toney Anaya declares "Los Alamos National Laboratory Week" to commemorate the Lab's 40th anniversary.

1993 — ALEXIS, a satellite designed and built at the Laboratory, is launched into orbit from an Air Force B-52.

1995 — A massive bomb explosion destroys much of a federal building in Oklahoma City.

And this from the 1967 Atom: Residents of the Denver Steel houses in the Western Area won their four-year battle when the Atomic Energy Commission's Albuquerque Operations Office announced its decision to offer the houses for sale to the occupants.

The information in this column comes from several sources including the online History Channel, the Newsbulletin and its predecessors, the atomic archive.com, Echo Vitural Center, Science & Technology, Real History Archives, and Carey Sublette, "Chronology for the Origin of Atomic Weapons" from www.childrenofthemanhattanproject.org/MP\_Misc/atomic\_timeline\_1.htm.



## April service anniversaries

### 40 years

Richard Hassman, ENG-ITS

### 35 years

Barton Olinger, ESA-MEE

#### 30 vears

Richard Carlson, ESA-TSE John Pratt, ADTR-TRO Jeannie Vasquez, CCN-4

#### 25 years

Celine Apodaca, ISR-IT Jose Archuleta, DX-2 James Bergauer, CFO-2 Paul Burgardt, MST-6 Randall Cardon, CCN-3 Alex Carrillo, NMT-11 Thomas Kunkle, EES-11 Roberta Martinez, LC-LM Elizabeth Redman, CFO-OAO Ward Rupprecht, ESA-TSE Teresa Salazar-Kerstiens, S-2 James Sheldon, ISR-4 Gary Thayer, D-4 Susan Trujillo, IM-2 Laurie Wiggs, HSR-2 Gerald Winsemius, CCN-4

### 20 years

Loretta Apel, PCO Scott Bowen, C-INC Fermin Casados, CFO-2 Gary Chavez, SUP-3 Geralyn Hemphill, D-1 Chih Yue Kao, X-4 Donald Mietz, ISR-4 G. David Rael, NMT-12 Collin Sadler, DX-1 Jay Stimmel, NMT-1 John Tegtmeier, DX-5 Alfonso Vargas Jr., NMT-2 Allen Wallace, SUP-DO Mary With, STB-EPO

### 15 years

Erik Anderson, CCN-4 Joel Berendzen, P-21 Ronald Chavez, D-DO Shawna Eisele, HSR-4 J. Tinka Gammel, T-1 Melinda Gutierrez, N-5 Heidi Hahn, EP Barbara Martinez, SUP-6 David McCollum, SUP-5 Daniel Oakley, SUP-3 Alice Travis, SUP-6 Marion Sasser, D-5 Michael Warren, T-6

#### 10 years

Werner Abfalterer, T-10
Jessica Archuleta, NMT-DO
James Bell, PM-IP
Judith Dolores, D-2
Jerome Gonzales, NWIS-UI
Elizabeth Gray, ENV-WQH
Emily Kluk, EES-6
R. Scott Lillard, MST-6
Bret Lockhart, C-OPS
Viola Maes, DIR
Joseph Mang, DX-2
Shean Monahan, HSR-6
Kevin Morley, P-23
Barbara Roybal, STB-EPO
Clinton Shoemaker Jr. CCN-4

#### 5 years

John Brackbill, CFO-1 Rocke Johnson, CFO-1 Peter McLachlan, CCN-12 James Narum, FM-WFM John O'Donnell, LANSCE-3 Tobin Oruch, ENG-CE Francisco Souto, X-4 Christine Ulibarri, HR-D-TR Gregory Wilson, D-1

### Los Alamos Employees' Scholarship Fund awards ...

continued from Page 6

The 10, \$2,000 Comforce Technical Services one-year scholarship recipients are Delana Farley of the Institute of American Indian Arts in Santa Fe, Christian Garcia and Amanda Lopez of Española Valley High School, Francesca Jimenez of McCurdy School in Española, Sarah Quintana of Pecos High School, Alex Riebli of Taos High School, Thomas Rodriguez of Penasco High School, Joseph Romero of Pojoaque High School, Justin Roper of West Las Vegas High School and Erica Velarde of the University of New Mexico.

In addition, four students will receive scholarships through the Endowed Leadership Scholarship Fund created in 2000 by former Laboratory Director John Browne and his wife, Marti. This fund was created to provide scholarship opportunities for Northern New Mexico students with significant financial need. These students also have demonstrated outstanding leadership qualities and achievements in their home, school and community.

The \$1,000-a-year for four years Endowed Leadership Scholarship Fund recipients are Jasmine Bennett of Taos High School, Amber Harper of Coronado High School, Lauren Massengill of Pojoaque High School and Nikki Rendon of Penasco High School.

Since the Los Alamos Employees' Scholarship Fund program began in 1998, 315 scholarships have been awarded, according to Fox of the Laboratory Foundation. And Laboratory workers have donated more than \$1 million to the scholarship fund since its creation.

### **In Memoriam**

### Alfred Dumrose

Laboratory retiree Alfred Dumrose died Jan 13. He was 80.

Dumrose was born in Tuckahoe, N.Y. In 1944, he received his bachelor's degree in chemical engineering from Purdue University.

From 1945 to 1947, he worked in Los Alamos with the Army Special Engineers Detachment (Manhattan Project). Dumrose returned to the Lab in 1950 as a technical staff member in the former Chemistry and Metallurgy (CMR) Division. He directed the operation of the enriched uranium chemical processing concentration plant for which he had responsibility for design and construction.

In 1963, Dumrose was named alternate group leader in Uranium Chemistry (CMB-8) and remained in that position for several years. In 1973, he left the Lab, but returned to CMB-8 in 1974. Dumrose continued to work in plant operations and process development in the Materials Science and Technology (MST) Division until his retirement in 1984.

He is survived by his daughter Michelle and her husband Stan.

### Robert Lee Walker

Manhattan Era employee and retired California Institute of Technology Professor Robert Lee Walker died Jan.5. He was 85.

Walker was born in St. Louis, Mo. He received a bachelor's in physics from University of Chicago in 1941 and earned his doctorate in physics from Cornell University with a specialty in high-energy physics in 1948.

With Cornell physicist Boyce McDaniel, Walker invented the pair spectrometer used to measure gamma ray energies.

While on the Manhattan Project from 1943 to 1946, Walker built pressure gauges — working both at the Lab and the University of Chicago.

Walker is survived by his son Craig Walker and daughter Jan Walker Roenisch.

# Donna Smith — Jane of all trades

by Hildi T. Kelsey

Several words come to mind when attempting to describe Technology Transfer (TT) Division Leader Donna Smith — static is not one of them. Talented, creative, well educated, gregarious, witty and philanthropic — she is Bob Vila meets Martha Stewart.

Perhaps the most astonishing aspect of Smith's abilities is the dichotomy of her hobbies. From woodworking and home re-modeling to quilting and knitting, her free-time pursuits are more of a reflection of her mood than a predisposition toward one specific activity.

"Some days you just want to go pound something. Other days it's best to sit and contemplate — on a snowy day, for instance, it is calming to work on needlepoint by the fire," she said referring to the motivation behind her creative works. "My hobbies are so completely different. I enjoy them all for very different reasons."

She must have been ready to "whack away" her stress when she designed and built a sauna room in the basement of her home as a present for her husband Tom Lyttle of Classification (S-7). The project included building walls, building the framing, installing tongue and grove cedar planking, installing electrical components, and applying the finish. "I didn't really like doing the electrical [work], but its a lot better than plumbing," she reflected.

Referring to how she became so adept and comfortable with these highly involved construction undertakings, Smith jokingly said, "In some respects, I guess I'm my father's son. I became his helper on projects around the house — roofing, home repairs, all that. My interest just kept growing from there."

Seemingly on the complete opposite end of the hobby spectrum, Smith also created (by hand) colorful quilts, such as a Frank Lloyd Wright design stained-glass pattern quilt of various hues of blue; a Celtic-style quilt cover for their bed, which is in quite good shape, according to Smith, considering it is a favorite napping spot for her dogs; and a lap quilt of burnt orange, maroon and beige used for chilly nights on the couch.

This talent she credits mostly to her mother but noted that her father sewed as well and her mother also did some handy work. "I guess I picked up [my talents] from both of them. Maybe it's genetic," Smith said.

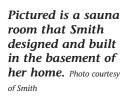
But, her interests don't stop with construction and sewing. Smith was a volunteer firefighter and emergency medical technician for about 10 years, which she asserted was a "career within itself," considering the time and effort that is put into training and keeping one's skills current.

Along with her husband, Smith also volunteers at the Best Friends Animal Shelter in Kanab, Utah, where they help take care of the 700 dogs, 30 horses, several sheep, many goats and several hundred cats living at the shelter.

Additionally, Smith and her husband donate time to national parks to do geology work. Recently, they assembled the fossil collection for Chaco Canyon National Cultural Park, using geological information and fossils surveys to write and edit the park's interpretive guide and helped develop roadside markers at significant sites. If all that wasn't enough responsibility, Smith also was on the Sierra Los Pinos board of directors where she helped make decisions on community issues, such as road maintenance and water usage.

Although "an interesting proposition" at 8,000 feet in the Jemez Mountains, gardening is another love of Smith's. "You can plant cold weather crops like sugar peas, beans and spinach in the middle of summer. Up here, while cold nights can be a challenge, top soil is another issue. My husband often jokes that he was around when dirt was made because he was the one making it," she said.

While obviously quite busy at home, Smith also is an avid traveler and said she and her husband like to "pack up and go without reservations." Smith has explored exotic places like China and Egypt, but







Technology Transfer (TT) Division Leader Donna Smith poses with a sweater, tapestry and colorful quilts she created. Photo courtesy of Information Management (IM) Division

said her favorite destination so far has been New Zealand. "It's a beautiful country, very open and not very populated. In fact, there are more sheep than people." She said she enjoys the diversity of New Zealand, which is roughly the size of California. "You can go from tropical beaches to alpine glaciers; forests to pastures, and from fjords to rain forests. It is highly varied in such a small area," Smith noted.

A native of Blacksburg, Va., where she grew up thinking that "orange and maroon were two colors that actually go together" — for clarification, talk to a Virginia Tech fan — Smith was drawn to Los Alamos because she thought, "Interesting job, interesting place — this will probably work for a couple of years."

Twenty-one years later, Smith and her husband are ready to retire. "Its time to go try some new pursuits. First, we want to take the skill we developed in traveling and raise it to a fine art. There are lots of parts of this country we want to explore," she said.

Along with a another rafting trip in the Grand Canyon and visits to other sites in the United States, Smith would like to go to Antarctica, Europe, Russia, the South Pacific, back to New Zealand and India. "Then, we will decide what to do next," she said grinningly.

With a doctorate in mineral economics (a cross between geology, mining and business), a master's of business administration with a concentration in finance and two bachelor's degrees — one in finance and one in general business — Smith said she also is considering teaching college courses in mineral economics, business or energy economics after she retires.

Finally, Smith said she and her husband are thinking about becoming seasonal park rangers in some of the nation's national parks so they can, "delve into the parks and spend time in amazing places."

Whatever Smith chooses to pursue after retirement, one thing is clear. She will not be making reservations at Sunnyville Retirement Community anytime soon.